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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/418,818	10/15/1999	DAVID CHEUNG	AM1084D01/T9	9377

32588 7590 01/15/2004

APPLIED MATERIALS, INC.
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EXAMINER	
ZERVIGON, RUDY	

ART UNIT	PAPER NUMBER
1763	

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/418,818	CHEUNG ET AL.	
	Examiner	Art Unit	
	Rudy Zervigon	1763	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11 December 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See Continuation Sheet*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: *1-6,9,10 and 44-62*.

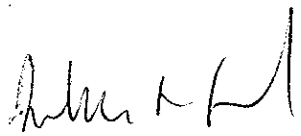
   Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

Continuation of 5. does NOT place the application in condition for allowance because: None of the pending claims are amended. The Examiner maintains all his positions stated in the Final Rejection. Applicant states that none of the cited references teach a computer readable program code for controlling the gas delivery system. However, as is stated in the Final Rejection, Felts et al (USPat. 4,888,199) teaches "a memory (column 10, lines 56-64) coupled to the controller comprising a computer readable program (column 16 - column 46- Felts et al 4,888,199) having a computer readable program embodied therein for directing operation of the substrate processing system, the computer readable program including a first (column 5, lines 16-40) set of computer instructions (column 16 -column 46 - Felts et al-199) for controlling the gas delivery system to introduce selected deposition gases (column 5, lines 17-40) into the process chamber at deposited gas flow rates". Further, Applicant states that none of the cited references teach "a first reflection from an interface between the photoresist layer and the antireflective layer of an exposure light is an odd number, but it is not an odd multiple, geater than one, of the wavelength of light to be used in a subsequent process operation on the layer.". However, the Examiner has asserted that Fourmun Lee teaches "means for forming a layer of photoresist (14, Fig.1;column 3, line 65- col.4, line 5) on the antireflective layer (13, Fig.1;column 3, lines 46-64), the antireflective layer (13, Fig.1;column 3, lines 46-64) having a thickness ("d", col.5, lines 10-15) and refractive index ("n", col.5, lines 10-15) such that a first reflection from an interface between the photoresist and the antireflective layer of an exposure light ("L", col.5, lines 10-15) will be a number/multiple (1/(2(n-1) - the inverse of all odd numbers, for n as integer; column 5, lines 10-15) multiplied by 180 (column 5, lines 15-25) out of phase with a second reflection from an interface between the antireflective layer and the substrate layer (12', 13'; column 5, lines 5-10) of the exposure light; and means for forming a photoresist pattern (column 5, lines 52-57) by exposing the photoresist layer to the exposure light and developing the exposed photoresist layer". Further, it was stated that "although Fourmun Lee teaches only n radians, where n=1, out of phase between consecutive areas 12' and 13', it would have been obvious to one of ordinary skill in the art at the time the invention was made to realize that odd multiples of radians is the same phase angle". The Examiner maintains all grounds of rejection.



JEFFRIE R. LUND
PRIMARY EXAMINER